Operating Systems

OS Basic Concepts (II)

Dr. M. Tanvir Afzal

Computer Installations

✓ After Multiuser, time-sharing OS, central computer with remote workstations

✓ User could communicate directly to computer rather than computer operator.

✓ Commonly used programs resides in the workstation mass storage

System Administrator

- ✓ Operator was no more needed to communicate between user and computer.
- ✓ Today's PC are on sole discretion of user

OS Basic Concepts

System Administrator

- Obtaining and Overseeing installations
- Issuance of new accounts
- Establishing Mass storage space limit

- - Rather than operating the machines in a hands-on manner.

OS Basic Concepts

OS Evolution

✓ From simple programs that execute one job at a time to complex systems having time-sharing, multiprogramming, multitasking, memory management.

OS Evolution

✓This evolution further continued by providing:

✓Time sharing, multitasking by assigning different tasks to different processors, or different tasks to one processor.

✓**Load Balancing**: Dynamically allocating tasks

OS Evolution

Scaling: breaking tasks into a number of subtasks compatible with the number
of processors available. Computer Networks are then helpful of managing resources across many machines and many users rather than an isolated computer.

Embedded Systems

- ✓ Medical devices, vehicle electronics, home appliances, cell phones, or other hand-held computers.
- ✓ Conserve battery power and working continuously in real-time fashion.

OS Basic Concepts (II)
- ✓ The rule of human expert
- ✓ System administrator
- ✓ Load Balancing
- ✓ Scaling
- ✓ Computer Networks.
- ✓ Embedded Systems